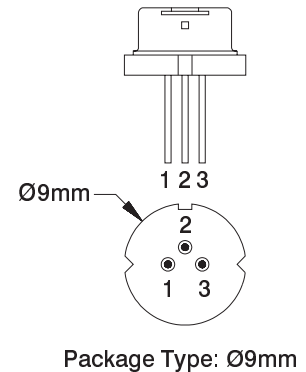
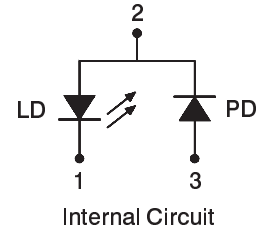


# Sanyo DL4038-025

## Laser Diode Specifications

The Sanyo DL4038-025 is an index guided AlGaInP laser diode with a typical output of 635nm and an absolute maximum output of 20mW. The diode features low threshold current which is achieved by a strained multi-quantum well active layer. A lasing wavelength of 635nm is eight times brighter than a 670nm diode. The DL4038-025 is suitable for applications including laser printers, laser alignment systems, and laser levels. The DL4038-025 has a Ø9mm package.



### Absolute Maximum Ratings (Tc=25 °C)

Characteristic	Symbol	Value	Unit
Optical output power	Po	20	mW
Laser diode reverse voltage	VR(LD)	2	V
Photodiode reverse voltage	VR(PD)	30	V
Operating temperature	Topr	- 10 to + 40	°C
Storage temperature	Tstg	- 40 to + 85	°C

### Operating and Electrical Characteristics (Tc=25 °C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Threshold current	Ith	—	45	70	mA	—
Operating current	Iop	—	80	110	mA	Po=20mW
Operating voltage	Vop	—	2.3	2.5	V	Po=20mW
Lasing Wavelength	$\lambda_p$	—	635	645	nm	Po=20mW
Beam divergence (parallel)	$\theta_{//}$	6	7	10	deg	Po=20mW, (FWHM)
Beam divergence (perpendicular)	$\theta_{\perp}$	20	25	35	deg	Po=20mW, (FWHM)
Differential efficiency	$\eta$	—	0.6	—	mW/mA	—
Monitor current	I <sub>m</sub>	—	0.03	—	mA	Po=20mW
Astigmatism	As	—	10	—	microns	Po=20mW

Disclaimer: The laser diode information summarized above is based on the respective diode manufacturer's commercial catalog and/or data sheet specifications. The data is presumed to be accurate; however, it is subject to change without notice. Optima makes no representation as to the accuracy of the information and does not assume any responsibility for errors or omissions contained herein. The user must refer to the manufacturers specifications for details concerning the intended application and operation, diode limitations, and safety.

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